

# **PRISON HEALTH CARE: AN OVERVIEW**

**by**

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# THE SENATE FISCAL AGENCY

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## **INTRODUCTION**

During the budget deliberations for the Michigan Department of Corrections (MDOC), questions were raised about prisoner health care and hospital and specialty care services provided under a managed care contract. In the midst of the budget process, the State Administrative Board gave the MDOC permission to extend its contract with Correctional Medical Services (CMS) to include medical service providers, or physicians, physician assistants, and nurse practitioners, displacing civil service positions. This paper was prepared to provide general information about managed care and health care in prison systems, and to present information about the cost of Michigan's prison health care system and a comparison with other states' systems. It should be noted that a lawsuit was brought against the extension of the CMS contract, and this paper's discussion of issues is designed to provide background information only, not opinion.

## **OVERVIEW**

Managing health care costs is accomplished through the relationship between health care financing and service provision. Health maintenance organizations (HMOs) are the form of managed care that links financing and services most closely. In an HMO, the organization employs or contracts with physicians and other health care professionals to provide care for its enrollees. With this type of arrangement, enrollees are assigned a primary care physician who serves as the "gatekeeper" for all of a person's health services, acting as both the clinical and the financial manager of services, also known as the primary care case manager. In some cases, physicians are given financial incentives to make cost-effective care decisions.

Another form of managed care is the preferred provider organization (PPO) in which an organization contracts with providers who agree to charge discounted fees or standardized rates, or who will accept per capita payments for all services provided to an enrollee in a specified time period. Contracting with a network of providers offers better chances for competitive pricing. Some aspects of the PPO model are relevant to contracting for prison health care, but the HMO model is undoubtedly the most applicable to correctional health care.

Many departments of corrections across the country have established networks of hospital and specialty care providers from whom services may be purchased at negotiated, discounted rates. Georgia and North Carolina are two states that have demonstrated significant cost savings through the use of preferred provider networks and the large volume of business that these purchasers of services will direct to hospitals and providers in the network. On the other hand, in correctional settings, the HMO model is best illustrated in cases where the department of corrections has contracted for comprehensive health care. The firm under contract is expected to adhere to a fixed budget, while meeting all the health care needs of each prisoner. This arrangement is designed to manage costs by shifting the management responsibilities of the health care system and thus the financial risk to the firm.

Beyond the relationship between payer and provider, there are several key components of cost-saving that are common among the variations of managed care. All types of managed care rely heavily upon utilization review procedures to determine medical necessity and the appropriateness of services and procedures for each patient. Requests for services are evaluated either by a panel of professionals or by an authorized physician. Some utilization

review systems require multilayered approval for all recommended treatments. This process has been effective in reducing costs by denying services that are not clinically indicated and/or by approving a lower-cost treatment alternative to an expensive request.

Many prison medical systems seem to have well-established utilization management practices. For example, North Carolina and Florida have internally developed their own utilization review protocol within their department of corrections, while states such as Georgia rely upon utilization review procedures prescribed by a contracted firm, such as CMS. Utilization review has been most widely used to curtail spending for services and procedures that are not clinically appropriate and to prevent unnecessary hospitalization. While sometimes credited as the primary source of savings, utilization review procedures are also frequently noted as having a substantial impact on slowing the growth of costs.

Savings that result from utilization review are typically expressed in terms of the savings that will minimize the inevitable growth in spending, known as cost avoidance. Actual cost reduction, or the amount saved over and above cost avoidance, is typically seen after the first year of utilization review procedures. The systematic application of utilization review procedures has actually decreased expenditures in some instances. For example, the Florida Department of Corrections (FDOC) attributes a reduction in hospital expenditures to utilization review procedures. Between fiscal year (FY) 1990-91 and FY 1992-93, the FDOC cut hospital spending from \$11.9 million to \$11.3 million, despite a 20% increase in the average daily prison population.

Another component of cost savings is alternative reimbursement systems. In a traditional fee-for-service model, physicians are reimbursed by insurance providers for each service, procedure, or contact at rates determined by the provider. Many forms of managed care operate using capitation, which allows for provider reimbursement only at fixed rates or by payment of an annual lump sum for each person enrolled, which shifts some of the financial risk to the provider and creates a direct incentive to practice cost-effective medicine. Paying physicians a fixed salary as opposed to reimbursing for each service performed is another strategy. Negotiating discounted rates with hospitals is also critical to reducing costs. In addition automated management information systems can contribute to the cause of more cost-effective service provision.

Moreover, containing pharmaceutical costs is an important component of managed care systems. One method to rein in these costs involves limiting prescription options to generic or lower-cost alternatives to brand name drugs. Health maintenance organizations accomplish these savings by establishing an official list of approved drugs known as a “formulary”, essentially restricting the physicians’ choices of medications to prescribe. Many HMO plans also have a supplemental policy of automatically substituting a drug listed on their formulary for any drug prescribed by an outside physician. More specific to prisons, another method entails purchasing pharmaceutical supplies at wholesale or discounted prices. Some prisons have cut costs by joining a “buyers group” or consortium, which enables them to place large volume orders and negotiate better prices.

## **MICHIGAN DEPARTMENT OF CORRECTIONS**

The MDOC’s health care services are appropriated in three parts. One part is appropriations for 20 clinical complexes that provide on-site, basic medical services to the prisons and prison

campus. These services include the provision of prescribed medicine, sick call, basic dental services, and regular checkups for prisoners with chronic conditions. Dialysis and pharmaceuticals are appropriated in these line items. Another part is a line-item appropriation for hospital and specialty care which includes care that cannot be provided on-site and major medical care. The third part is the mental health services appropriated in the consent decree subunit<sup>1</sup> and paid directly to the Michigan Department of Community Health (DCH), which operates the program.

Looking at the medical health care portions, Figure 1 shows that, as the prison population has grown, the appropriations<sup>2</sup> for the clinical complexes and the hospital and specialty care portions of the health care system also have increased. In total, the appropriations for medical health care have grown from \$48.7 million in FY 1985-86 to \$118.0 million in FY 1999-2000, or 142.2%. In the same time period, the population has grown from 18,800 to 45,200, or 140.4%. The growth of the appropriations for hospital and specialty care at 179.1% has far exceeded the growth of the prison population, whereas the growth rate of clinical care at 126.7% has been slightly lower than the prison population growth. In FY 1995-96, when the MDOC contracted with United Correctional Managed Care<sup>3</sup> to provide managed care services for hospital and specialty care, the appropriation for hospital and specialty care decreased, as seen in Figure 1.

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<sup>1</sup>In the 1980s, Michigan entered into two consent decrees under Federal court supervision, commonly called Hadix and USA. The consent decrees cover many conditions, among which are fire safety, hygiene, and protection from harm at specific facilities: Michigan Reformatory, Marquette Branch, and Jackson Prison. In addition, the consent decrees address system-wide issues including medical and mental health care. In 1991, the State entered a third consent decree, called Glover, dealing with female prisoners. Congress enacted the Prisoner Litigation Reform Act (PLRA) as part of the Balanced Budget Down Payment Act in April 1996. The PLRA terminated existing orders for prospective relief unless a court found that the prospective relief was necessary to correct a current or ongoing violation of a Federal right. Today, some of the portions of the consent decrees have been terminated whereas other portions remain in place. All costs for the consent decrees, even terminated portions, are appropriated separately from other institutional costs in a subunit called consent decrees. The line items within the subunit identify the consent decree or the service provided.

<sup>2</sup>Appropriations include legislative and administrative transfers and approximate total expenditures.

<sup>3</sup>In 1997, a managed care contract was awarded to United Correctional Managed Care, Inc. Subsequently, the contract was transferred to Correctional Medical Services (CMS). In 1999, a revision to the CMS contract extended its term through April 1, 2003, and added an accelerator to the per diem contract rate. In April 2000, the contract was revised to include service providers.

**Figure 1**

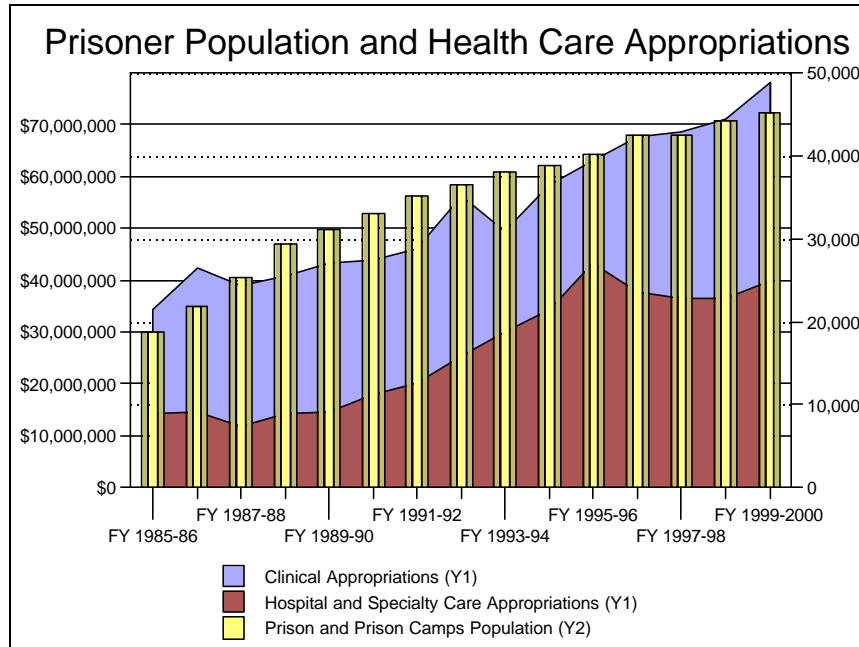
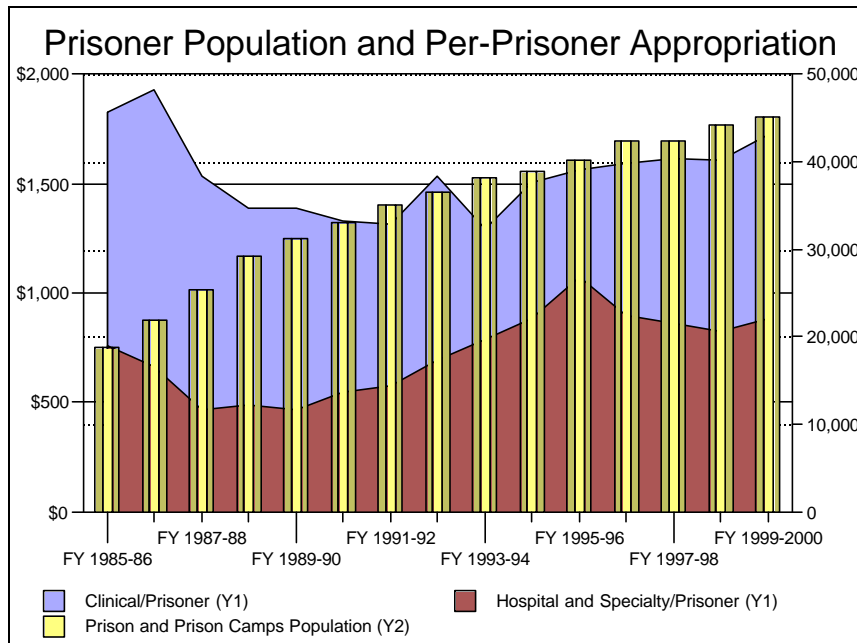


Figure 2 shows the appropriations on a per-prisoner basis in comparison with the prison population. Clinical complexes serve more than one prison and grow in response to the construction of new prisons. As a result, the uneven growth of the clinical centers appropriation per prisoner reflects the growth of prison capacity. As new prisons are established, new fully staffed and operational clinical centers are added. Until the capacity of the clinical center is fully used, the higher cost per prisoner for health care services reflects unused capacity.<sup>4</sup> However, when there is excess capacity, the cost for each additional prisoner added to the system should be less than when capacity has to be added to the system.

<sup>4</sup>The MDOC participates in the State pharmaceutical contracts, which will be renegotiated and will affect FY 2000-01 costs, adding to the uneven per-prisoner appropriation growth.



Figure 2



In addition to caseload, both the clinical care and the hospital and specialty care expenditures are sensitive to price changes and to the number of prisoners requiring high-cost care. For example, when the number of prisoners with HIV/AIDS increases, overall care costs will increase, just as when the price for treatments of HIV/AIDS continues to increase, overall care costs will rise. By comparing growth rates in prison population and health care appropriations, the effect of price changes and complexity can be seen. However, because clinical centers react to prison growth, not to prison population growth, this comparison can be made only with hospital and specialty care appropriations.

Between FY 1989-90 and FY 1998-99, the prison population increased 41.6%, and the appropriation per prisoner for hospital and specialty care increased 75.6%. Assuming that the number of prisoners treated for costly diseases did not increase, price increases would be responsible for the additional 34.0% increase. In comparison, between 1990 and 1999, the consumer price index (CPI) for medical care services<sup>5</sup> increased 59.3%, suggesting a favorable comparison between the CPI and the actual growth in hospital and specialty appropriations per prisoner. Because the growth in hospital and specialty care appropriations includes both the increase in service costs and the complexity of care, the comparison is even more favorable.

In part, the growth rate of hospital and specialty care costs was curtailed by the managed care contract. In FY 1995-96, when the appropriations for hospital and specialty care reached \$1,074 per prisoner, the MDOC sent out a request for proposal and decided upon a managed care contract that operates like the PPO described above. For the current contract rate of

<sup>5</sup>Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, not seasonally adjusted, Midwest urban, medical care services.

\$70.57 per prisoner per month<sup>6</sup>, the contractor provides a network of hospitals and specialists, as well as utilization review of services<sup>7</sup>. At the end of the year, there is a settlement between the State and the contractor for the State to pay costs that exceed an agreed-upon budget figure or to share a certain portion of the savings when health care costs are less than the amount budgeted. In addition, under the original contract, the contractor provides temporary replacement personnel for hard-to-fill clinical center positions. These services, paid for through the clinical complexes, are separate from the per-prisoner fee and are billed at the contractor's cost.

With the extension of the contract to include physicians, physician assistants, and nurse practitioners, the provision of services by the contractor will become more like an HMO, meaning that the medical service providers will become a gatekeeper for hospital and specialty services. According to a National Institute of Justice report<sup>8</sup> on prison health care, some states are pursuing single providers of comprehensive health care services to address quality concerns and to reduce indirect litigation costs related to the provision of health services. However, the same report indicates that single provider contracts may result in slightly higher total costs for care. Referring back to [Figure 2](#), after three years of decline in per prisoner appropriations for hospital and specialty care, the FY 1999-2000 appropriation per prisoner represents a 7.2% increase. In future years the total appropriation for hospital and specialty care services will continue to increase, because the managed care contract now calls for an annual inflation adjuster applied to the second through the fourth year of the contract equal to the Consumer Price Index, All Medical Goods and Services Indicator for the Midwest, Urban Cities Average, and because of the expected continuing growth of the prison population.

## COMPLEXITY IN THE PRISON POPULATION

In general, the prison population should not require expensive medical services, because of the high concentration of males between 19 and 40 years of age. Even though this sex and age group generally needs fewer medical services, there are many reasons that this particular population requires more care than the general population requires. These reasons include prior drug use and poor prior health care. Additionally, diabetes and hypertension among African American males drives much of the chronic medical care.<sup>9</sup> Moreover, the HIV/AIDS population and the aging of the prison population add to the complexity of the prison health care system.

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<sup>6</sup>According to a February 2000 Auditor General Report, the original contract with United had a base rate of \$49.66 per prisoner per month, which was increased to \$64.67 per prisoner per month when the contract was assigned to CMS in April 1998.

<sup>7</sup>In addition to hospital and specialty care, the contractor provides renal and peritoneal dialysis services and telemedicine services. Clinical facility positions that had been privatized under a pilot project were staffed under the contract until they could be filled by Civil Service employees. These positions were filled with Civil Service employees until the April 2000 contract extension. Mental health services are not provided by the contractor.

<sup>8</sup>McDonald, Douglas C, "Managing Prison Health Care and Costs", National Institute of Justice, Office of Justice Programs, US Department of Justice, May 1995.

<sup>9</sup> According to the data the in MDOC annual statistical report, the 1998 prison population was 58% nonwhite and 96% male.

The number of known HIV/AIDS cases in Michigan's prisons, as reported by the Bureau of Justice Statistics, has grown from 390 in 1991 to 546 in 1998. However, as seen in Table 1, there has not been a regular progression in the number of cases. Although the number of cases has grown slowly, the combination of medications required to treat HIV/AIDS has increased in cost. According to the MDOC in an FY 1998-99 request for legislative transfer into the clinical complex line items, monthly HIV/AIDS treatment costs had increased from \$1,100 to \$1,800 per infected prisoner. Assuming that there are 500 HIV/AIDS cases treated, this \$700 monthly increase results in an additional annual expenditure of \$4,200,000.

Table 1							
NUMBER OF KNOWN HIV/AIDS CASES IN MICHIGAN PRISONS							
<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
390	454	434	384	379	528	419	546
<b>Source:</b> Bureau of Justice Statistics							

The Department reports a total of 133 special needs beds, which include 80 barrier-free beds in proximity to medical care and food service at Lakeland Correctional Facility, 7 long-term care beds and 4 short term care beds at Marquette Branch Prison, 16 long-term care beds at Huron Valley Men's Facility, and 26 chronic care beds at Duane L. Waters Hospital in Jackson. The number of special needs beds does not equate to the number of prisoners who appear to be in need of special care. Some lower-level needs prisoners are accommodated in barrier-free beds at other facilities that are not in proximity to medical care and food service. Some able prisoners are given work assignments in which they care for disabled prisoners. Some higher-level needs prisoners are placed in community facilities where security is provided.

The population in need of long-term and chronic care is a blend of younger and older prisoners. However, as seen in Table 2, the fastest growing age groups in Michigan prisons are those over 40 years of age. As the babyboom moves through the age groups, the growth of this segment should continue, not just because prisoners will age in place, but because the age of admission to prison will increase. Although being elderly alone does not account for additional medical costs, with the number of prisoners in their 70s and 80s increasing, health care costs, such as those provided to the elderly in the general population, will continue to increase.

Table 2										
AGE OF PRISONERS IN INSTITUTIONS										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	Change 1990- 1998
< 20	1,566	1,620	1,413	1,172	1,317	1,375	1,583	1,559	1,500	-4.2%
20-29	14,950	15,552	16,071	15,587	15,517	15,150	15,482	15,894	15,693	5.0%
30-39	11,583	12,382	13,378	13,769	14,228	14,375	14,565	15,282	15,433	33.2%
40-49	4,270	4,822	5,538	5,923	6,614	7,326	7,903	8,781	9,343	118.8%
50-59	1,475	1,637	1,877	2,098	2,323	2,522	2,754	3,195	2,699	83.0%
> 60	411	454	521	560	578	649	715	817	890	116.5%

**Source:** Department of Corrections Annual Statistical Report 1990 - 1998

## COMPARISON WITH OTHER STATES

In a survey of states published in the *Corrections Compendium*, a publication of the American Correctional Association, Michigan is among the states with the highest per prisoner health care costs. Table 3 shows the annual per-prisoner health care costs of Michigan and some surrounding states.<sup>10</sup> According to a National Institute of Corrections (NIC) survey, Michigan is unique in that less than 60% of health care costs are for medical care while more than 40% are spent on mental health care.<sup>11</sup> In fact, the researchers were unable to include Michigan in their survey because of the rare relationship between the MDOC and DCH in the operation of the mental health prison, Huron Valley Center.

Table 3			
ANNUAL PER-PRISONER HEALTH CARE COSTS OF SELECTED STATES			
State	Report Period	Average Daily Population	Actual Amount Spent per Inmate
Michigan	CY 98	44,791	\$4,150
Ohio	FY 99	47,972	1,911
Indiana	CY 98	18,617	1,445
Illinois	FY 98	38,862	1,753
Minnesota	CY 98	5,766	3,875

**Source:** Corrections Compendium, *Table 1: 1998 Inmate Population and Health Care Budgets*, Vol. 24, No. 10, October 1999, pp. 9-10.

<sup>10</sup>Wisconsin was not included, because it has had rapid prison population growth and uses large amounts of leased bed space in other states to provide prison capacity. This makes Wisconsin uncomparable to states with state-owned facilities.

<sup>11</sup>Prison Health Care Survey: An Analysis of Factors Influencing Per Capita Costs. Deborah Lamb-Mechanick, Ph.D., and Julianne Moore, Ph.D., 2000.

The NIC survey found that health care system costs are related to the method of service delivery, the use of capitation, and the number of prisons in a given prison system. With the exclusion of Michigan, Hawaii, Indiana, Maine, Montana, and Nevada, the NIC researchers found that in 1998, the average covered prison population was 24,217 prisoners and that the average annual health care cost per inmate was \$2,610. Appropriations for the medical portion of Michigan's health care for an average covered prison population of 42,500 equated to \$2,475 per year in FY 1997-98. As seen in Table 3, Michigan's per annum rate reported by the MDOC in the *Corrections Compendium* is \$4,150, suggesting that mental health care costs were \$1,675 per prisoner per year, or about two-thirds of the cost of medical care.

In order to find out more about other states' systems, the Senate Fiscal Agency contacted a few of the surrounding states. As anticipated from the information in the NIC report, one of the primary differences between Michigan and other states is the provision of mental health services. In Michigan, ambulatory mental health services are provided in the correctional facilities for prisoners who can be maintained in the general population with medication. Prisoners with more complicated mental health conditions, may be housed in a protected environment, intermediate care program, or residential treatment program. More severely mentally ill prisoners are housed in the Huron Valley Center, a 400-bed facility operated by DCH with security provided by the MDOC.

Michigan's prisoner mental health care was developed, in part, under the supervision of the Federal courts through consent decrees. Mental health care costs are appropriated in the consent decree subunit including costs for MDOC security personnel and other staff, and an amount that is paid to the DCH based on billings from that Department. In FY 1999-2000, the total appropriation for mental health care in the consent decree subunit was \$83.6 million, with \$68.9 million for mental health services and \$14.7 million for security. For FY 2000-01, the appropriation increased to \$86.8 million, with \$71.4 million for mental health services and \$15.4 million for security. Based on prison population estimates from the MDOC, the appropriations equate to \$1,819 per prisoner per year in FY 1999-2000 and \$1,835 per prisoner per year in FY 2000-01.

Even though other states are beginning to provide a specific facility for prisoners needing mental health services, none of the states contacted provides as much capacity in its facilities as Michigan does. For example, Ohio, which is also subject to a consent decree covering mental health services for prisoners and has a similarly sized prison population, recently constructed a new mental health prison facility for about 200 prisoners. In addition to the dedicated mental health prison, Ohio has set aside units for prisoners who cannot live within the general population, but do not require hospitalization. In FY 2000 and FY 2001, Ohio appropriated \$73.8 million and \$75.8 million respectively for all mental health services including security costs. These appropriations, assuming that average daily population remains at the reported FY 1999 level, equate to an annual cost of about \$1,550 per prisoner.

In July 1997, Indiana contracted with Prison Health Services for all health care services including mental health services, but with the exception of nursing services which are provided by state employees. Currently, Indiana has mental health care beds scattered throughout the prison facilities and the department of corrections is working on an integrated plan for working with the mentally ill population. In 2002, that state will open a dedicated mental health prison with three-120 bed pods.

Minnesota has a very small prison population because the state has emphasized community correction alternatives. A newly designed unit in an existing Minnesota correctional facility will serve about 45 mental health prisoners. Moreover, for the past two fiscal years, Minnesota contracted with CMS for all health services except nursing and psychiatric, which are provided by state employees. The calendar year 1998 results shown in [Table 3](#) reflect a half-year of CMS services, but do not include the mental health prison or a new transitional care unit that opened in mid-July 2000. The FY 1999-2000 appropriation for health care in Minnesota of \$24 million equates to \$3,934 per year per inmate.

## **CONCLUSIONS**

When compared with other states, in the self-reported survey published in the *Corrections Compendium*, Michigan appears to spend more than other states do on prisoner health care services. Based on surveys of surrounding states, the higher cost may result from Michigan's provision of more mental health care capacity than other states provide and the unique relationship between the DCH and the MDOC in providing prisoner mental health care services. The managed care contract for hospital and specialty services appears to have contained medical care costs, which were at an all-time high prior to the signing of the contract. However, appropriations for hospital and specialty care will continue to increase as the price accelerator moves the expenditure per prisoner higher. Also, as more medical services become part of a contract with a per-prisoner cost, the cost of providing care to one additional prisoner should be higher than it is when excess capacity can be used to serve the additional prisoner. Moreover, the mounting complexity of care needed for the prison population will continue to grow as the proportion of the HIV/AIDS-infected and elderly populations in the prison population continues to increase.